# WEATHER ON THE ATLANTIC AND PACIFIC OCEANS

[The Marine Division, W. E. HURD, acting in charge]

## NORTH ATLANTIC OCEAN, MAY 1939

By H. C. HUNTER

*Atmospheric pressure.*—The eastern North Atlantic had pressure higher than the normal of the month, notably the area near the British Isles, where the station at Lerwick, Shetland Islands, averaged 0.29 inch above. From the 35th parallel of latitude southward practically all portions averaged close to or a trifle above normal. Over middle, but especially higher, latitudes, from the 30th meridian westward the pressure was lower than normal, on the average, but the fluctuations here were marked and came in quick succession; the first 10 days and the final fortnight had mostly lower pressure than the week from the 11th to 17th.

The extremes of pressure found in vessel reports at hand were 30.61 and 28.72 inches. The higher mark was reported by the American steamship *Memphis City*, on the forenoon of the 25th, when about 170 miles west of Valencia, Ireland. The lower reading was noted by the Danish steamship *Kentucky*, close to 50° N., 35½° W., on the evening of the 9th.

TABLE 1.—*Averages, departures, and extremes of atmospheric pressure (sea level) at selected stations for the North Atlantic Ocean and its shores, May 1939*

| Station | Average pressure | Departure | Highest | Date | Lowest | Date |
|---|---|---|---|---|---|---|
| | *Inches* | *Inch* | *Inches* | | *Inches* | |
| Julianehaab, Greenland | 29.71 | −0.14 | 30.18 | 13 | 29.30 | 23 |
| Reykjavik, Iceland | 29.94 | +.02 | 30.39 | 28 | 29.00 | 23 |
| Lerwick, Shetland Islands | 30.09 | +.29 | 30.48 | 28 | 29.59 | 5 |
| Valencia, Ireland | 30.12 | +.17 | 30.59 | 25 | 29.29 | 5 |
| Lisbon, Portugal | 30.04 | +.07 | 30.30 | 8 | 29.68 | 2 |
| Madeira | [1] 30.05 | +.04 | 30.27 | 4 | 29.80 | 2 |
| Horta, Azores | 30.16 | .00 | 30.44 | 24 | 29.82 | 14 |
| Belle Isle, Newfoundland | 29.86 | −.03 | 30.42 | 16 | 29.00 | 31 |
| Halifax, Nova Scotia | 29.96 | −.01 | 30.34 | 26 | 29.46 | 10 |
| Nantucket | 29.96 | −.03 | 30.31 | 13 | 29.47 | 9 |
| Hatteras | 30.02 | +.01 | 30.31 | 19 | 29.68 | 9 |
| Bermuda | 30.11 | .00 | 30.28 | 19 | 29.90 | 15 |
| Turks Island | 30.00 | .00 | 30.08 | 27 | 29.95 | 3 |
| Key West | 29.97 | .00 | 30.11 | 5 | 29.88 | 8 |
| New Orleans | 29.96 | −.01 | 30.14 | 4 | 29.74 | 8 |

[1] For 23 days.

NOTE.—All data based on a. m. observations only, with departures compiled from best available normals related to time of observation, except Hatteras, Key West, Nantucket, and New Orleans, which are 24-hour corrected means.

*Cyclones and gales.*—More encounters with gales than usually occur during May have been reported, the first 9 days being particularly stormy for the season.

A LOW of large area was centered near southern Greenland on the 2d and 3d, and thence it advanced toward the east-southeast, with some increase in energy, by the 4th, when it was central about 400 miles west-northwest of Ireland. The eastern portions of the chief steamship routes to northwestern Europe were considerably affected for 2 or 3 days, but the cyclone lost strength by the 6th, when it had advanced but a moderate distance farther; thereafter it consolidated with a LOW which had come from the American side of the ocean.

This latter LOW, which was little developed when near Georgia on the 1st, had gained decidedly in energy by the morning of the 3d, when the center was east of the Virginia capes. All three of the month's reports so far received of wind forces greater than 10 were connected with this storm, on the 3d; these intense winds were met not far from the southeastern coast of New Jersey, and the directions were between north-northwest and northeast. The American tank steamship *Cities Service Koolmotor* had a force of 12, while the battleship *Tennessee* and the liner *Barbara* estimated the highest force as 11.

Continued advance toward the northeast brought the LOW to the southern Grand Banks by the 6th, and to a position near 47° N., 34° W., by the forenoon of the 8th. Consolidation with the preceding LOW had now occurred, and a very energetic cyclone resulted. But after 2 days with little movement the center lost force rapidly and drew northward toward Greenland. Thereafter for about a week the much-traveled portions of the North Atlantic were practically free from winds of forces greater than 7.

The most notable gales of the second half of May were connected with a LOW system which, early on the 18th, extended from north to south near the 60th meridian, with deepest center over the Gulf of St. Lawrence. Consolidation of the centers followed, so that during the 19th and 20th there was one intense center located a short distance to northeastward of Labrador. By the 21st the center was near Cape Farewell, but from it a rather narrow trough extended far to the southward. Strong winds were met by several vessels within the area affected, and one, the Coast Guard cutter *Chelan*, patrolling to southeastward of Cape Race, recorded force 10.

By the 23d the LOW center was close to western Iceland, and was ceasing to have marked effects on the weather along the main traveled lanes.

*Fog.*—The amount of fog increased over that of the month before, as generally happens during spring. Compared with April 1939, more foggy days were noted almost everywhere to northward of the 35th parallel, especially from the coasts of New England to the southern Grand Banks and from the 25th meridian to the vicinity of the British Isles.

When the records of previous Mays are scanned, the present May is indicated as substantially normal for fogginess over western areas to northward of 35° N., but it was foggier than the average around the western Azores and for approximately 500 miles to westward of them, also near the British Isles and the Bay of Biscay and for about 700 miles to westward.

The 5°-square of the whole North Atlantic with most reported fog was that located near the southern edge of the Grand Banks, 40° to 45° N., 45° to 50° W., where 17 days brought fog. For the Grand Banks and vicinity the least foggy portions of the month were the first 8 days and the period from the 19th to the end. Close to the northeastern coast of the United States, however, fog was rather infrequent until the 21st, but quite common thereafter.

Over the eastern half of the North Atlantic reports indicate the most foggy square was that from 45° to 50° N., 10° to 15° W., with 8 days. The period from the 7th to the 15th was the time when fog occurred most often over these eastern areas.